California Oil World

ESTABLISHED 1908 « « « 15c » » » JULY 26, 1934

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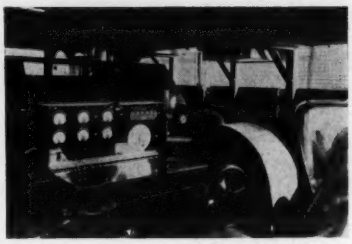
GUN PERFORATOR EQUIPMENT

FOR CALIFORNIA FIELDS

Rear view showing Guns in upper compartments and individual loads in trays below. Note complete, compact equipment.

A sturdy, completely self-contained unit, ready for service day or night, rain or shine.



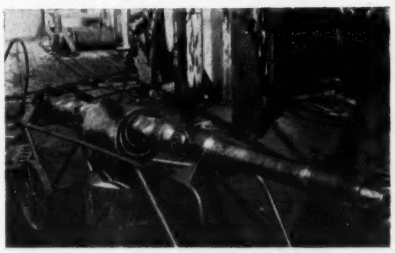
The "shooter's seat," showing depth measurement gauges, operating controls, and instruments to prove actual detonation of charge in the well.

An instant success only 12 months ago, Gun Perforator Service has brought satisfaction to 106 different companies in hundreds of wells.

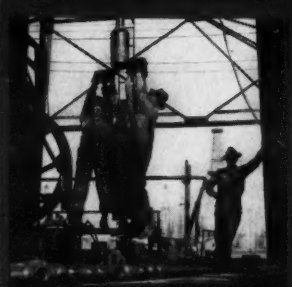
Perforating 7 days each week—often 3 or 4 wells during 24 hours—efficient service trucks have been making tomorrow's history. A larger and faster unit is today proving our slogan: "If the Oil is There, We Get It"—at a cost so low that it is often repaid by one day's extra production.

Lowering Gun Perforator into the well.

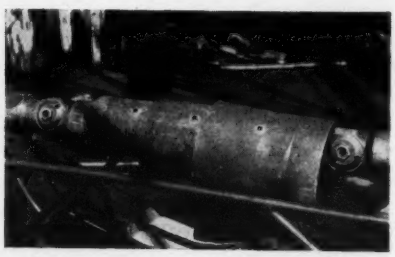
Gun perforation consists of electrical detonation of powder to propel a steel bullet through one or more strings of casing, with cement filling both the annular spaces between the strings and the space back of the casing. Clean perforations are spaced as desired, at any specified depth, without distorting the casing. Gun Perforator Service comes to your well on a completely self-contained truck unit. You supply nothing except the ordinary pulling equipment usually on every well.



Ready for a test shot through 6⅝"—26 lb., 8⅝"—36 lb., and 10¾"—45 lb. casing



The Lane-Wells Magnet Tubing Service—another of "Tomorrow's Tools—Today!"



Result of test shot described at left. Similar perforations are obtained with cement between casing.

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An apology and a promise! With only limited equipment available, delays were unavoidable — we offer sincere apology. Today we can promise you prompt, dependable service. Our telephone is JEfferson 5289.

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Gun Perforator Service is now available on the Gulf Coast—see below. Arrangements are being perfected to cover the entire Mid-Continent and major foreign fields. We invite your detailed inquiries.

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California Oil World

JULY 26, 1934

Oil Production Tax Analyzed; Income Tax Change Explained

When the last Congress decided to raise additional revenue for the government by imposing a 1/10thc tax on crude oil production, natural gasoline production and refinery throughput, and required the posting of a $500 to $1000 bond to insure payment thereof, more than the usual amount of confusion arose in the industry over the obscure features of the announced program.

One of the most perplexing features with respect to the new Act was the effective date. This obscurity has been cleared up, however, by advices from Washington which state that the date has been advanced from July 17 to Aug. 1, next.

Oil Producers Sales Agency has made an analysis of the act, and because of its importance to members of the petroleum industry and all tax payers connected therewith, these points are being reproduced:

Bonding—The preliminary regulations require a bond of $500, from producers, if production is confined to one collection district (internal revenue); a $1000 bond if producing premises are located in more than one district.

Registration—Every person who, as a producer or as a working interest operator, has management or control over the operation of any well producing crude petroleum is required to register. Producers who deliver their entire production to a purchaser are not required to provide bonds, but only to register.

Forms for registration are in the mail, or being placed in the mail in the Sixth District (ten Southern California counties, including Kern and San Luis Obispo), and presumably are also being mailed in the northern district.

Fuel Used on Leases—Such fuel, according to the local Internal Revenue Office, would not be classified as a sale; but where produced on one lease and used on another, might be so classified. A ruling on this particular point has been requested from the Commissioner at Washington. Meanwhile, it will be well to keep records of production used to carry on lease operations. The Revenue Act (Section 604 (f)-1 says in this regard: "The refining of crude petroleum on the premises where produced, the removal of crude petroleum therefrom, **or any transfer or other disposition** of crude petroleum shall be considered a sale."

Natural Gasoline Tax—Apparently this tax would be paid by the processor or plant operator. There is no specific **bonding requirement** to cover its collection.

The Producer-Refiner-Purchaser—Any operator who is either a producer-refiner, or a producer-refiner-purchaser, is required to deposit but one bond of $500 if in one district, or $1000 if in more than one.

Tax Effective—The Revenue Act was approved May 10, 1934; and the sections relating to the production and refining tax carry a special effective date clause, making these sections effective on the thirtieth day after the date of enactment. As previously stated, this date has been advanced to August 1.

The Agency has also received a letter from Snell, Nichols and Co., accountants, pointing out the results to be expected from a recent treasury decision regarding the Federal income tax. The letter follows in full.

"A matter of far-reaching importance in connection with Federal income tax, affecting both individuals and corporations, in the future and for years in the past which are not closed under the statute of limitations, is reflected in a recent U. S. Treasury decision covering the method of computing deductible depreciation for Federal income tax purposes.

"In brief, considerable agitation was reflected in Congress during its last session with respect to the depreciation deductions being too large under then existing procedure. No material change in the Revenue Act itself was deemed practicable, but a change was made in administrative provisions which, it was estimated, would produce additional income tax in the approximate amount of $85,000,000. All taxpayers claiming deductions for depreciation are affected by the administrative changes as reflected by the treasury decision referred to.

"This treasury decision puts the burden of proving deductible depreciation squarely upon the taxpayers and, in conformity with the requirements of the decision, they must prepare and sumbit comprehensive depreciation schedules to the government agents who examine returns for all open years, and also submit like schedules with income tax returns in the future. These schedules include, among other data, the estimated useful life in future years of the various classes of equipment upon which depreciation deductions are claimed.

"What the government is driving at, of course, is the reduction in amounts of depreciation deductible for past years where net profits were reported, and also a like decrease in the said deductions for future years. It appears that the government will not require a recomputation of depreciation deductions for past years still open where net losses resulted for income tax purposes, but amended returns for the years still open may be submitted under the law.

"Therefore, it behooves every taxpayer who filed returns for the past two or three years in which substantial net losses may have been reported, which losses resulted in part at least because of excessive depreciation deductions as now defined under the Treasury decision referred to and other memoranda relating thereto, to file amended returns for those years yet open. Thus, the practical application resulting from filing of the amended returns and reducing the depreciation deductions will be to carry forward a greater sum to be written off as depreciation deductions in later years, beginning with the year 1934.

"Material savings may be made by those taxpayers whose returns as filed for the past several years reflected net losses as above described if they will take advantage of their rights and protect their interests by the preparation and filing of amended returns. No doubt in practically all cases the returns as originally filed, if amended, need only be changed with respect to depreciation deductions so as to conform to the revised administrative provisions covering the deductibility of this item of expense."

DRILLING SUMMARY

Oil field operations reported during the week ended July 21, show 9 notices to drill new wells filed, as compared with 14 during the previous week. 1 was in Huntington Beach, 1 in Inglewood, 1 in Los Angeles county, 1 in Santa Barbara county, and 5 in Kern county. Total new wells this year, 312, as compared with 309 at the same date last year.

Deepening or redrilling jobs numbered 17, as compared with 27. Total to date, 369; to same date last year, 497.

Abandonments numbered 5, as compared with 8. Total to date, 174, to same date last year, 199.

Detailed list of notices follows on page 7.

Berry 1 Recovering Tubing

General Petroleum's Berry No. 1 is making slow progress in recovering lost tubing. About 9600 ft. have been recovered. This Belridge test, which gave high promise of opening a new deep zone, has run into the usual tough breaks which accompany most wildcatting ventures, but G. P. is staying right with it, and hopes eventually to win out.

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California June Gasoline Sales Decrease To 116,126,172 Gallons

Taxable gasoline sales in June amounted to 116,126,172 gallons in California, according to the State Board of Equalization. June sales decreased 2,721,615 from those of May, which were 118,847,787 gallons, and were 9,078,886 gallons under sales for the same month in 1933. However, the picture, as compared with 1933, is distorted, inasmuch as all marketers filled all available storage in advance of the Federal gasoline tax, which became effective in July of last year. It is this latter factor which causes the poor showing for June of this year, rather than that the market was exceptionally poor. An additional contributing factor to this year's unsatisfactory showing as compared with last year, was the higher prices prevailing during June of this year.

Sales for 1934 to June 30 totaled 675,626,140 gallons ,while sales for the same period last year totaled 646,496,650 gallons. This year's increase for the first six months was 29,129,490 gallons, or practically 5,000,000 gallons per month.

Unquestionably, figures for next month will reflect the practical cessation of sales in the San Francisco Bay district during the period of the strike. Just how much effect this will have on total gallonage is hard to determine, although estimates place the loss to the companies at 500,000 gallons per day during the period of the general strike, during which time gasoline was marketed to emergency users only.

Standard, Shell, Union, Associated, General Petroleum, Richfield, and The Texas ranked in the order named. The seven companies sold a total of 83,288,794 gallons, leaving 32,837,378 gallons to be sold by all other companies. The major companies sold 71.72% of all taxable sales, and all other companies sold 28.28%.

There were 28 companies that sold 300,000 gallons or more of taxable gasoline during June. These companies, in order of taxable sales, follow:

	Taxable Gallonage	Total Sales
Standard Oil Co.	25,315,337	51,653,702
Shell Oil Co.	12,112,422	25,472,189
Union Oil Co.	11,550,128	15,592,486
Associated Oil Co.	10,285,612	16,451,256
General Petroleum Corp.	10,052,333	10,929,752
Richfield Oil Co.	9,283,533	10,605,140
The Texas Co.	4,689,429	15,383,120
Wilshire Oil Co.	4,265,860	4,275,331
Hancock Oil Co.	2,850,874	2,976,467
Macmillan Petroleum Corp.	2,499,243	2,544,425
Rio Grande Oil Co.	2,359,420	2,613,462
The Caminol Co.	2,004,674	2,011,054
Western Oil & Refining Co.	1,984,150	1,972,694
Olympic Refining Co.	1,574,540	1,580,958
Triangle Oil & Refining Co.	1,456,863	1,442,294
The Petrol Corp.	1,256,181	1,295,910
Seaside Oil Co.	1,198,306	4,568,651
Mohawk Petroleum Co.	1,182,588	1,193,082
Chas. W. Fourl	1,119,083	1,108,187
St. Helens Petroleum Co.	990,821	1,007,217
R. R. Bush	969,297	965,734
Estado Petroleum Corp.	900,784	891,776
Sunset Pacific Oil Co.	811,717	2,847,791
Edington Oil & Refining Co.	806,429	807,666
Bachmann Petroleum Corp.	744,012	780,803
The Norwalk Co.	733,921	1,789,768
Envoy Petroleum Co.	717,429	710,089
Exeter Refining Co.	516,414	932,843
All Others	1,894,772	.....
Total June	**116,126,172**	**184,403,847**
Total May	118,847,787	
Decrease	2,721,615	
Total to June 30	**675,628,140**	

Phillips May Enter Cal.

Somebody is reported to have been in the Mountain View quite recently looking over the situation and telling those he met that he represented Phillips Petroleum, presumably the big Mid-Continent corporation of that name. Some four or five years ago this company did send a representative to California who opened an office in San Francisco and leased a block of wildcat land around Los Gatos and in the old Moody Gulch field, but withdrew from the state without doing any work, presumably because of the depression.

No verification or denial has been obtained of the Mountain View report, and it may be that Phillips does plan to come to California again. Phillips Oil Co. was incorporated in California several years ago by local people but did nothing and is believed to be out of existence.

Three Wells In Trouble

Three tests on the Santa Barbara Mesa have had mechanical troubles which have delayed their progress.

East Elwood is cleaning out the hole to run liner, with the bottom around 2120 ft. Fred Cole's Young No. 1 is standing cemented at 2050 ft. with the casing set about 20 ft. higher. The Daniel Fisher Smith No. 1 also got into trouble and had to back up and redrill from 400 ft.

Test Planned Near Huntington Beach

W. G. Bradford and W. L. Brown will drill a new test well 1½ miles southeast of Huntington Beach near the intersection of Talbert Road and the Coast Highway, on sec. 19, 6-10, and on part of a 114-acre lease from Dr. A. C. Thorpe of Los Angeles. The land was formerly part of the old Pacific Gun Club holdings. Drilling will be under the name of the B & B Oil Co., apparently a partnership, although the state permit was taken out in Mr. Bradford's own name. Mr. Bradford is connected with Signal Oil & Gas Co., but the corporation has nothing to do with this venture, which is personal. Mr. Brown is a resident of Long Beach, formerly with Ring Petroleum, and will be in charge of the drilling.

Location is about midway between Huntington Beach and Newport, and in an area where heavy seepages have led to considerable past drilling, the nearest to the Bradford site being Globe Petroleum's in 1924 about a quarter mile northwest. Jim O'Donnell drilled to the southeast, and Western Oil & Refining put down two to the northeast, all going to about 5000 ft. without commercial success. Standard's Surf wells (producing) are two miles northwest.

Winshale Starts Well

Winshale Oil Co. is starting another well on its property at 21st and Cherry, Signal Hill.

Washington Revises Regulations Against Hot Oil Operators

WASHINGTON — Complete revision of all hot oil regulations for the purpose of strengthening the national program for stabilization of the oil industry, has been announced by the oil administration. The new regulations supersede those issued in July, 1933, at the beginning of efforts to maintain a more careful balance between demand and production. They were recommended by the division of investigations and the Petroleum Administrative Board to meet administrative and enforcement requirements which have developed in the last year.

Major new provisions follow:

Every producer and manufacturer must accurately gauge the amount of petroleum or petroleum products handled, and not use any device to prevent such measurement. This is intended to meet the practice of using by-passes to facilitate the unseen drawing off of oil.

The records of all persons dealing with oil and its products must be more adequate and exact, with all details concerning the origin and history of the oil or products being handled.

Carriers are made liable to punishment if they accept a shipment of oil or oil products which is not accurately billed.

All persons engaged in producing or handling oil are required to permit agents of the Department of the Interior to have free access to their books, inspect their wells, pipe lines, tanks, plants and all equipment. Heretofore, the agents have had in the main only access to the books of operators.

Hereafter, every producer in the east Texas field will be required to file with the division of investigations a chart truly showing the location of every well on his property and all outlets from it, drawn to scale.

To assist in enforcing the new regulations and the oil code, the Oil Administration will utilize provisions of a new law permitting the assessment of a fine of not more than $10,000 or imprisonment for not more than ten years for making false statements with respect to any matter falling under the jurisdiction of any governmental agency. This new act will be applicable to the reports required under the new regulations, and provides for this penalty in addition to the $500 fine or not more than six months imprisonment included in the National Recovery Act.

Secretary of Interior Ickes issued the following statement on the regulations:

"The revised regulations form one of the fundamental steps we are taking for restoration of the industry and wise utilization of our oil resources in reshaping our program for efficient enforcement. They will meet weaknesses which have appeared in the development of our plans under the previous regulations, and will materially strengthen our weapons for going after the hot oil operator and curbing his destructive policies."

Ickes Orders Investigation Into Prices Charged For Fuel, Heating Oils

WASHINGTON—Administrator Ickes has ordered an immediate investigation by the Petroleum Administrative Board into prices charged for fuel and heating oils. The investigation is the outgrowth of charges that some distributing companies have adopted practices which tend to create a monopoly, and the administrator decided that it was necessary to "protect the interests of household and industrial consumers of fuel and heating oils."

The investigation will start with a public hearing in Washington, July 30. "I have been advised by the petroleum board", he said, "that prices may be advancing too rapidly, and we desire to determine if such advances are justified. We want to get at all the facts."

In view of the foregoing dispatch from Washington, California oil companies will await with interest the result of the proposed investigation. California has large reserves of fuel oil stocks and is deeply concerned over any action which may be taken that may in any way interfere with coastwise shipments of fuel oil to the Atlantic ports. Such shipments have been going forward at a very satisfactory rate every month since the embargo was placed on South American imports.

Concerning the proposed hearing on price increases, R. G. Stewart, director of Standard of New Jersey, in charge of domestic marketing, dispelled reports of a possible shortage as the basis of higher price levels, by pointing to the large reserves of fuel oil on the Pacific Coast. He declared that there is an ample supply of fuel oil for domestic heating oil purposes for years to come, and added that should such a shortage impend, the government very easily could alter its program of holding down imports.

Fuel oil for domestic heating purposes is playing a steadily increasing part in the oil business. However, the big demand has and will continue to rest with fuel supplies for shipping and railroads. On the price situation, Mr. Stewart is quoted as saying:

Last year, oil used for domestic heating purposes was sold in the New York metropolitan area at 6½ cents to 7 cents a gallon. New contracts have been submitted customers with a maximum price of 8¾ cents a gallon. This created a widespread impression that this country was facing a shortage of heating oil with a prospective rise of perhaps two cents a gallon. A requirement of the oil code is that top price quoted in a contract shall not be less than 25% more than the posted price on the date a contract is signed. As this figure was seven cents when the contracts were sent out, the maximum price had to be 8¾ cents. Indications are that the advance will not exceed one-half cent a gallon, Mr. Stewart said.

Imperial Well Down 600

John Barth of Altadena has his No. 2, drilling for carbon dioxide gas or oil, on sec. 5, 11s-16e, some six miles east of Niland, Imperial county, down 600 ft. Mr. Barth says he hopes for high gravity oil between 1200 and 1600 ft., this hope being based upon a report by John A. Jose of Los Angeles. Mr. Jose is of the opinion that carbon dioxide and helium gas should be developed at a lesser depth.

Hogan Gets 150 Bbls.

Hogan Petroleum's latest completion, Mid-State No. 1 in sec. 29, 30-29, Mountain View, for 150 bbls. initial was not as satisfactory a producer as had been anticipated. The hole was finished at 5845 ft. with approximately 100 ft. of oil formation penetrated.

Fremming Demands 1929 Wage Scale

At the closing session of the Labor Board sub-committee hearings last week, Harvey Fremming, representing the Oil Workers' Union, presented a demand that 1929 earnings, based on a 48-hour week, be substituted for those now in effect for the 36-hour week. This demand, it was stressed, is being made in all divisions of the oil industry where organized labor has affiliations.

Present wage scales, effective throughout the California fields and plants, at least by the larger companies, are based on the 1929 scale but modified by the shorter number of working hours in the week.

The hearings, which terminated intermittent sessions covering several weeks, resulted in the threshing out of a number of "sore spots" which employes feel should receive attention. Chief among them is the delay in being reimbursed for back pay as specified under the retroactive clause contained in Sec. Ickes' ruling on wages, as of last May. Since the Oil Administrator has made no move to acquiesce to requests from California operators that this clause should be modified, the workers see no reason for longer delay in the payment now overdue. Employes of all companies, large and small, were apparently a unit in making demands that such payments be made.

There was much argument, but not a great amount of progress in the important problem of reclassification of field and plant employes under groupings which would be more satisfactory in ironing out the wage differentials.

All of these protests, demands and suggestions will be given careful consideration by the sub-committee board, and a report will be forwarded to Washington for final determination.

Crude Hearing Set

An open hearing on crude allocations for Santa Fe Springs will be held Friday at 10 o'clock and promises some heated discussions. The hearing will be held before the "Complaints and Grievances" committee of which Joseph Jensen is the chairman. Operators with large production and those with wet well problems will be on hand to air their troubles.

Union Tests Wible Well

Union Oil Co. early this week began testing its Wible well in sec. 23, 30-28, on the northwest end of Mountain View. The well was cemented at 5548 ft. After bailing down the hole some oil was obtained and then the well sanded. The crew is preparing to swab, with prospects considered good for obtaining fair commercial production.

Operators in Mountain View have watched this test because it is expected to determine the productivity of the area between present production in sec. 24, and sec. 15, on which latter Union Oil brought in a small producer on its Kern County Land Co. lease. It is not yet certain whether this latter project is on the same structural fold as other Mountain View wells, or has tapped a new pool.

Corby Returns From Honolulu

Grant Corby, petroleum geologist, recently returned from Honolulu, ending a thirty-day vacation trip with Mrs. Corby. Mr. Corby is in charge of field operations in California for the Western Geophysical Co. He was formerly geologist with Continental Oil Co. and Belmont Investment Co.

Fellows Well At 1140

Midway Peak Oil Co. was down 1140 ft. Tuesday in sand and shale carrying oil in its test of the Temblor range southwest of Fellows. It is expected that the drill will go down at least 200 ft. more before setting casing for a test.

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California June Crude Production 15,466,596 Bbls.; 515,556 Daily

California production during June, according to A. P. I. figures, totaled 15,466,596 bbls., 515,556 daily, against 15,070,718 (486,152 daily) during May, and 478,155 daily during June, 1933. Total production during June was 395,978 bbls. greater than May production, and June daily production was 29,404 greater than that of May. It was also 37,401 bbls. daily greater than production during June, 1933.

This production average was 15,256 bbls. more than the June allowable of 500,300 bbls. per day. The July allowable, however, has been further raised by Washington to 509,400 bbls. per day.

In spite of the fact that June production exceeded the allowable, stocks were drawn upon to the extent of 1,556,452 bbls. during the month. Total storage on May 31 was 139,130,932 bbls., which had been reduced to 137,573,740 bbls. by June 30. One year ago, on June 30, 1933, storage totaled 164,179,313 bbls. Reduction in stocks during the twelve-month period totaled 26,605,573 bbls., of which total reduction 21,586,586 bbls. were in stocks of heavy fuel, gas and diesel oils. These latter stocks have been reduced from 100,492,854 bbls. on June 30, 1933, to 78,906,268 on June 30, 1934.

Fuel stocks were reduced 1,459,695 bbls. during June; gasoline-bearing crude stocks gained 134,509 bbls. to 35,500,861 bbls.; unblended natural gasoline gained 4051 to 2,507,723 bbls.; gasoline dropped 363,693 to 12,374,999; naphtha distillates gained 108,924 to 1,173,145; miscellaneous gained 19,452 to 7,110,744 bbls. Of the above, all have declined since Jan. 1, 1934, except unblended natural gasoline, which has increased 203,529 bbls., and miscellaneous, which has gained 234,384.

The fact that fuel oil stocks have shown a steady monthly decline approximating 2,000,000 bbls. may have something to do with the increased drilling and wildcatting activity in the San Joaquin Valley, as well as with the restoring to production of many old wells in the district. In this connection, it will be remembered that the Associated Oil Co. recently emptied its Kern Front reservoir, for the first time in many years. In addition, there has been a well-informed report that two of the major companies were entering the field seeking crude contracts.

During June, 52 new rigs were erected, a decline of six from the May figure. Of these 52 rigs, 25 were in fields in the

(Continued on Page 14)

CALIFORNIA PRODUCTION

(Figures of Production and Stocks are in barrels of 42 Gals.)

	Total Production	—DAILY AVERAGE—		
Group No. 1—	**June**	**June, 1934**	**May, 1934**	**June, 1933**
Belridge—North	168,243	5,608	7,032	*
Belridge—South	61,074	2,036	2,132	*
Coalinga	619,933	20,664	17,211	10,749
Elk Hills	256,865	8,562	8,945	12,674
Fruitvale	120,431	4,014	3,796	4,625
Kern River	326,347	10,878	10,317	9,051
Kettleman Middle Dome	6,112	204	264	444
Kettleman North Dome	1,834,465	61,149	58,910	61,375
Lost Hills	132,315	4,411	3,741	7,428*
McKittrick	95,727	3,191	3,128	1,723
Midway-Sunset	1,724,317	57,477	57,008	46,201
Mountain View	228,292	7,610	6,210	788
Mount Poso	317,964	10,599	8,645	7,945
Round Mountain	150,466	5,016	4,982	2,696
Wheeler Ridge	13,101	437	439	472
Group No. 2—				
Capitan	17,201	573	515	12
Elwood	348,385	11,613	11,618	13,607
Rincon	43,826	1,461	1,531	1,889
San Miguelito	20,739	691	724	1,156
Santa Barbara	29,894	996	933	859
Santa Maria	163,979	5,466	4,913	2,435
Summerland	1,606	54	37	101
Ventura Avenue	803,871	26,796	26,728	33,075
Ventura-Newhall	120,817	4,027	3,772	3,252
Watsonville	1,800	60	60	60
Group No. 3—				
Brea-Olinda (Fullerton)	350,001	11,667	10,380	7,488
Coyote—East	95,822	3,194	2,593	
Coyote—West	309,008	10,300	8,362	10,008†
Domingues	606,762	20,225	17,136	19,053
Huntington Beach	1,423,197	47,440	41,692	30,649
Inglewood	284,894	9,496	7,865	11,863
Lawndale	4,698	157	140	233
Long Beach	2,168,108	72,270	68,186	74,546
Los Angeles-Salt Lake	24,105	803	802	909
Montebello	163,524	5,451	5,160	4,710
Newport	.....	.....	.....	.....
Playa del Rey	267,942	8,931	9,110	11,660
Potrero	12,359	412	441	294
Richfield	253,460	8,449	7,962	6,429
Rosecrans	87,454	2,915	2,606	3,056
Santa Fe Springs	1,254,260	41,809	41,746	53,987
Seal Beach	301,207	10,040	10,340	13,092
Torrance	219,178	7,306	6,944	6,368
Whittier	32,947	1,098	1,096	1,193
Total	15,466,696	515,556	486,152	478,155
May	15,070,718	486,152		
Increase	395,978	29,404		

*—Lost Hills figure includes North and South Belridge.
†—East and West Coyote were previously combined as Coyote.

STOCKS HELD IN PACIFIC COAST TERRITORY BY CALIFORNIA OIL COMPANIES

	June 30, 1934	May 31, 1934	June Stock Changes	Dec. 31, 1933
1. Non-Gasoline-Bearing Crude, Residuum, Gas and Diesel Oils	78,906,268	80,365,963	—1,459,695	92,664,274
2. Gasoline-Bearing Crude	35,500,861	35,366,352	+134,509	35,879,163
3. Unblended Natural Gasoline	2,507,723	2,503,672	+ 4,051	2,304,194
4. Gasoline (not including distributing and service stations)	12,374,999	12,738,692	—363,693	12,687,385
5. Naphtha Distillates	1,173,145[1]	1,064,221[1]	+108,924	1,347,891[1]
6. All Other Stocks	7,110,744[2]	7,091,292[2]	+ 19,452	6,876,360[2]
7. Total	137,573,740	139,130,192	—1,556,452	151,759,267
[1]Estimated amount of unfinished gasoline contained in item 5	950,335	919,418		1,024,397
[2]Coke included in item 6	610,477	615,611		620,313

CALIFORNIA DEVELOPMENT

	New Rigs Up	Producers Active Drilling	Producers Completed	Daily Initial Output	Active Producing	ABANDONED WELLS Drillers	ABANDONED WELLS Producers
Group No. 1—							
Belridge—North	1	6	....	....	20	....	....
Belridge—South	..	1	....	....	104	....	1
Coalinga	..	....	....	....	962	....	....
Elk Hills	..	....	....	....	189	....	....
Fruitvale	..	....	2	479	61	....	....
Kern River	2	2	....	....	1,240	....	....
Kettleman—Middle Dome	..	1	....	....	1	....	....
Kettleman—North Dome	5	26	3	16,018	69	....	....
Lost Hills	..	....	....	....	309	....	....
McKittrick	..	2	....	....	196	....	....
Midway-Sunset	3	6	....	....	2,413	....	....
Mountain View	7	15	6	8,051	22	1	....
Mount Poso	7	6	4	1,054	134	1	1
Round Mountain	..	....	1	165	42	....	....
Wheeler Ridge	..	....	....	....	34	....	....
Group No. 2—							
Capitan	..	2	....	....	8	....	....
Elwood	1	5	....	....	51	....	....
Rincon	..	1	....	....	32	....	....
San Miguelito	..	1	....	....	3	....	....
Santa Barbara	3	5	....	....	17	....	1
Santa Maria	..	3	....	....	172	....	....
Summerland	..	....	....	....	22	....	....
Ventura Avenue	..	12	1	886	161	....	....
Ventura-Newhall	1	8	....	....	462	....	....
Watsonville	..	....	....	....	7	....	....
Group No. 3—							
Brea-Olinda (Fullerton)	1	1	....	....	348	....	2
Coyote—East	..	....	....	....	75	....	....
Coyote—West	2	3	1	430	43	....	....
Domingues	1	8	4	4,757	64	....	....
Huntington Beach	2	3	2	221	449	2	1
Inglewood	2	7	2	2,346	193	....	....
Lawndale	..	....	....	....	7	....	....
Long Beach	5	19	6	1,536	1,058	....	....
Los Angeles-Salt Lake	..	....	....	....	155	....	1
Montebello	..	11	....	....	172	....	1
Newport	..	....	....	....	....	....	....
Playa del Rey	1	....	....	....	163	....	....
Potrero	..	....	....	....	11	....	....
Richfield	..	....	....	....	224	....	....
Rosecrans	..	1	....	....	73	....	....
Santa Fe Springs	2	7	3	391	525	....	....
Seal Beach	..	1	....	....	112	....	....
Torrance	..	....	....	....	453	....	....
Whittier	..	....	....	....	151	....	....
Miscellaneous Drilling	6	32	....	....	....	2	....
Group No. 4—							
Buttonwillow Gas Field	..	....	....	....	....	....	....
Dudley Ridge Gas Field	..	3	....	....	....	....	....
Goleta Gas Field	..	2	....	....	....	....	....
June	52	200	35	36,334	11,007	6	8
May	58	188	43	83,009	10,909	10	24
Decrease	6	12*	8	46,675	98*	4	16
Average for year 1933	30	124	21	22,842	9,199	14	18
Average for year 1932	18	108	15	13,069	8,928	16	14
Average for year 1931	22	207	21	30,370	8,911	20	15

*—Increase.

Refiners To Protest New Gasoline Allowable

California refiners will present a protest to the Oil Administrator as a result of the sharp decrease in the state's August gasoline allotment which was fixed at 4,954,000 bbls., as compared with 5,535,000 bbls. for July. This represents a decrease of 10.33% in the August allotment. Added to the heavy backlog of unsold refined products resulting from the strike in the San Francisco Bay region and the Pacific Northwest, this additional stocking up of refined products will work a double hardship on refiners and may seriously embarrass the new Pacific Coast Petroleum Agency program just launched when the general strike developed.

The August crude quota for California, which was cut 19,200 bbls. to 490,000 bbls., a reduction of 3.77%, is only about one-third of the cut taken by the refiners. It is going to be hard to take, nevertheless, because producers had been led to expect that the state's production would not fall below the 500,000-bbl. level during the summer months, and their production quotas were geared to much higher levels.

With the longshoremen's strike, which has tied up Pacific Coastwise shipping since last May, on the road to peaceful settlement by arbitration, oil company tankers finally have begun unloading their cargoes and are distributing them by tankcars and trucks to their various destinations. This is true at Portland and conditions in the Seattle-Tacoma area also have quieted down.

A survey of the losses entailed by the strike will show that the oil industry sustained losses comparable with any industry. A conservative estimate places the loss of sales in the bay region at 500,000 gallons of gasoline. Added to this heavy loss were reduced sales in the Northwest; the tied-up cargoes; and the impaired export business. This latter is relatively high.

Statisticians also point out that the August gasoline quota of 4,954,000 bbls. includes 800,000 bbls. of casinghead which would reduce the quota for next month to 4,154,000 bbls. of gasoline—a dose which California refiners are loath to take, but since refiners generally are forced to share the same dose, but in a lesser degree, it is expected they will have to grin and bear it unless Ickes consents to a modification of the California allotment because of the extraordinary conditions arising from the strike.

California took almost 25% of the 81,000-bbl. reduction in the national crude quota which was fixed at 2,449,300 bbls., as compared with 2,530,300 bbls. in July.

The decrease resulted primarily from the stipulation by the Oil Administrator in setting the August gasoline allocation at 36,270,000 bbls. that gasoline inventories should be reduced 4,270,000 bbls. in August. This action was necessary because the surplus in storage has been increasing recently, tending to hold back recovery, according to Ickes. Crude oil production requirements are lessened by this necessity for reducing stocks to balance the supply and consumer demand.

Virtually all the producing states shared in the decrease, with Texas' production lowered more than the others. Texas was reduced 40,800 bbls. daily to 1,001,300. Other reductions: Arkansas, 2600 to 30,400; California, 19,200 to 490,200; Illinois, 100 to 12,500; Kansas, 3300 to 131,200; Kentucky, 1400 to 11,700; Louisiana, 1700 to 87,200; New York, 1100 to 10,600; Ohio, 100 to 12,800; Oklahoma, 9400 to 480,100; Pennsylvania, 3300 to 40,700 and West Virginia, 700 to 11,600. Montana's allowable was increased from 8000 to 8800; Wyoming, 2800 to 35,000 and New Mexico, 100 to 46,700. Colorado, Indiana and Michigan remained the same at 3000; 2300 and 33,200, respectively.

Two Wells Set Casing

Surface casing has been cemented in two of the most important tests in Mountain View.

Twelve-inch casing was landed at 1200 ft. in National No. 2, being drilled by Wood-Callahan-National Oil on a 28-acre parcel, while 13-inch casing was set to approximately 1060 ft. in Dormax No. 1, being drilled by the Allen Brown Corp.

National No. 2 is the second undertaking for Wood-Callahan, and the first since its completion of National No. 1. This project is the field's most prolific producer. The second well is now below 1850.

Allen Brown's Dormax well is on a 10-acre lease originally leased from E. G. Starr. It is offset by productive leases and is thought to be higher structurally than other wells in the field.

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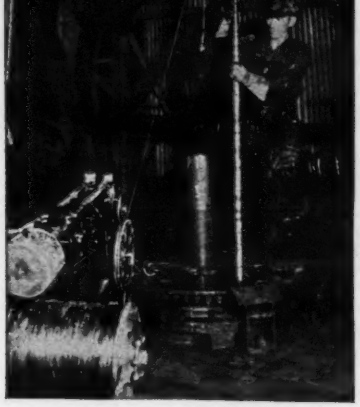

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("U. S. Patent 1,962,634, and others pending")

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DAILY PRODUCTION

California Oil World Estimate

	Week Ended July 21, 1934	Week Ended July 14, 1934	Week Ended July 22, 1933
Long Beach	67,800	69,300	73,650
Santa Fe Springs	41,700	42,700	54,000
Huntington Beach	47,900	46,600	37,875
Seal Beach	9,500	10,400	11,750
Inglewood	9,950	10,900	11,800
Torrance	7,400	7,300	6,375
Dominguez	19,250	21,350	20,550
Rosecrans	3,350	3,400	2,900
Del Rey	9,000	9,200	11,250
Lawndale	150	150	250
Potrero	400	400	500
Los Angeles Basin Totals	**216,400**	**221,700**	**230,900**
Ventura Avenue	29,500	27,900	32,600
Elwood	11,600	11,100	13,875
Rincon	1,600	1,900	2,150
Kettleman Hills	76,100	64,200	63,500
Belridge	8,000	8,200	6,500
Midway-Maricopa	57,700	59,600	46,900
Rest of State	130,000	134,400	95,000
State Totals	**530,900**	**529,000**	**491,425**

Civil War Ends

LOYAL citizens of California, including the leaders of legitimate labor unionism and a host of non-communistic labor-union members, quickly put the quietus on the civil war started at San Francisco under color of a general strike. We expected just this, nothing more nor less.

While the battle was over and ended almost as soon as it was begun, the California oil industry has suffered greatly as the result of the brief conflict in which it had no interest and with which it did not interfere until attacked. California oil workers, as well as others who took no part in the disturbance, will suffer from the general set-back to industry as a whole.

Under the circumstances it is unfortunate that Secretary Ickes has so drastically cut the gasoline allowable for August, although possibly his action was unavoidable. However, the industry will surely overcome these difficulties just as it has overcome a multitude of previous troubles, and will resume its career of prosperity, unless it is blocked by some stupid move at Washington or by unforseen trouble within its own ranks.

We sincerely hope that the Mid-Continent reports of a general strike in the oil fields are without foundation. Even though they may have what they consider good cause for complaint, oil workers should take a stand firmly against such a move. We believe that their experienced California leaders concur in this view and will give them similar advice. The trouble seems to be in two directions: First, some ground for complaint as to wages, hours and conditions outside of California; second, an expansion of membership so great as to fill the ranks with men who, as one of the California leaders put it recently, "do not realize that they must learn to crawl before they can run."

Organized oil workers can do a lot to improve their condition without resorting to strikes. We hope and believe that they will.

Union Gets Oil In Santa Maria Area

Union Oil Co.'s Moretti No. 1, located on the Santa Maria plain about a mile and a half south of the town and the old oil field proper, sanded up after a three-day pumping test during which the well was reported to have produced about 200 bbls. of 16 gravity crude daily, from a depth of approximately 2400 ft.

The yield was sufficient to demonstrate that Union Oil has made a new strike in virgin territory, which may yield the company handsome returns, and at least will add materially to its already large reserves in the Santa Maria district. Union holds a large block of the A. N. Macrate leases. This is the second test made by Union in this vinicity. The first, made several months ago, was drilled to about 2800 ft. and abandoned.

Moretti No. 1 is located several miles from the wildcat drilled by Western Gulf, but it was due to some showings obtained in the latter test that caused Union to try its luck.

However, if Union Oil Co. succeeded in opening a new field on the Santa Maria plain, the credit in a large measure will be due to the persistence of Frank Gore who, directly or indirectly, "sold" his faith in this area to Superior Oil Co. which did some post-holing, then to General Petroleum which drilled a well, and later to Western Gulf. Undiscouraged by one failure after another, Gore finally interested A. N. Macrate of Long Beach, who blocked off a large amount of acreage, which he turned to Union.

Even if the Moretti well should fail to make steady production, it will induce other tests, for the oil is sufficiently high in gravity to make this drilling attractive.

Union's success out on the Santa Maria plain has created an incipient oil boom. Landowners are being besieged by lease hounds who are scurrying around in search of small parcels of available lands which are not included in the 2300-acre tracts leased by A. N. Macrate of Long Beach, on one of which the Union producer is located. This acreage is optioned by Union. Half a dozen landowners are reported to have leased small parcels, which carry a 90-day drilling clause. A considerable amount of money is said to have changed hands, some of the leases running into five figures.

Plymouth Runs Tester

Plymouth Oil Co.'s wildcat on the outskirts of Baldwin Hills is running a formation tester to determine the nature of its reported strike. Some showings of oil sand have made this project look more encouraging. The depth is below 4900 ft., deepest in the field.

Shell Completes Well

Shell Oil Co. recently completed a 900-bbl. producer—Rindge No. 16—in the Inglewood field. Hole was bottomed at 3244 ft. The gas accompanying the oil is unusually rich, running three gallons per 1000 c.f. of gas.

TRADE & FINANCE

The oil industry has contributed its share, and then some, to the success of the "New Deal." Not only in actual funds, but in the loan of high-powered executives to assist in keeping the wheels running smoothly.

* * *

James A. Moffett, vice president of Standard Oil of California in charge of eastern and foreign business, now heads the housing committee, one of the most important programs launched during the closing days of Congress. He has been granted "leave of absence" by Standard and assumed charge of his new duties early this month.

* * *

Mr. Moffett is a close friend of the President and a closer friend of "Jim" Farley. He has been an enthusiastic supporter of the President's policies, and was a liberal contributor to the Roosevelt campaign. His father was one of the founders of the old Standard Oil group.

* * *

J. Howard Marshall, personal representative of Administrator Ickes, finds Los Angeles a more desirable habitat than Washington. At any event his wife has joined him and they are established here in their new quarters. Marshall is "all set" to serve as counsel or major domo to the latest Congressional committee which is to visit the Pacific Coast on another investigation.

* * *

Soon, the new housing committee will have to erect a building especially to house these so-called records of investigation. Last summer's committee took a whole carload of data back east with them.

* * *

Just as W. C. Van Fleet was getting that long-cherished dream of his under way—a new home on a choice ranch he owns on Klamath river, which "W. C." says is one of the prettiest spots on the Pacific Coast—along came this new Pacific Coast Petroleum Agency and immediately he was pressed into service as general manager. That left "the Missus" to carry on with the home building, so it's going to be all right after all, but it's a long trek from Los Angeles to Oregon. And "Bill" doesn't like the idea of commuting anyway. So, what?

* * *

Retirement by the Associated Oil Co. of its outstanding funded debt on Sept. 1, next, has been announced by President Humphrey. This will involve retirement of the remaining $3,482,000 of an original issue of $24,000,000, 12-year 6% gold notes dated Sept. 1, 1923. The notes are payable at 102½ plus interest, and are currently selling at 103 and 103½. Associated's current cash position, together with the saving to be effected on interest payments, makes the retirement advisable a year in advance of the final due date.

* * *

Magnolia Petroleum Corp. has called for redemeption on Aug. 15 at 100¼ and interest, the $1,500,000 remaining outstanding of its 4½ debentures.

* * *

It's Socony-Vacuum Oil Co., Inc., now. Approval of the change in name was given by stockholders at the May meeting, and the board since has registered the name in various states in which the Standard of New York, Inc., and Vacuum Oil Co. Inc., were operating.

* * *

Apparently is costs money to change names. A maximum "domestication fee" of $5000 was paid the state of Virginia by Socony-Vacuum for the privilege of being "domesticated."

* * *

Union Oil Co. directors have maintained the company's dividend position year in, year out, during hard times as well as during the good old prosperity days. That is just one reason why stockholders hold onto their stock. Union's sales for the first six months this year amounted to $26,500,000, an increase of $2,300,000 over the first half of 1933.

* * *

Like Associated and other providently managed companies, Union Oil has been steadily reducing its bonded indebtedness. As of April 1, last, Union concluded final payment of the remaining outstanding Series C 5% bonds, making a total decrease of $6,006,000 in indebtedness since Dec. 31, 1933. Larger companies find it more expedient to reduce outstanding obligations than retain top-heavy cash reserves. Despite this reduction Union's cash resources approximated $9,600,000, as of June 30, last. Current assets were more than 8 to 1 of current liabilities.

* * *

Oil stocks last week reflected the general note of uneasiness occasioned by the strike which tied up marketing activities along the coast to the north of San Francisco. While weakness was general, the oil list at the week-end joined in the sharp sell-off. This reactionary move crowded issues which had not been inclined to give ground, and the whole group sagged.

* * *

Brokerage firms are now more favorable to the oil group than at any time in several years because they feel that the industry has gone far toward setting its house in order. With Barnsdall selling at 6⅝, Shell Union at 7½, Pure Oil at 9¼, Consolidated Oil at 9½, and Tide Water Associated at 10⅞, bargain hunters in the low-bracket group found little difficulty in laying away a good supply for the turn. Odd-lot business indicates that purchases in these, as well as other groups, are going into strong boxes and are not for speculative purposes.

* * *

Richfield bondholders and those having claims against the company have been given till July 28 to file with the committee. The period of deposit formerly was scheduled to have expired July 14. The committee has not revealed the amount of bonds and claims now on deposit, but has indicated to inquirers that a substantial amount has been received.

—E. R. H.

Gilmore Well Makes 1500

Gilmore Oil Co.'s new producer at Mountain View is rated at 1500 bbls. daily, but has not entirely cleaned up. The hole was finished at 5500 ft. as one of the best completions of the week.

State Drilling Report

	Well No.	S.	T.	R.
New Wells				
Los Angeles County				
Barstow Oil Co.				
Walker	2	35	5 N	16 W
Inglewood				
Standard Oil Co.				
L. A. Investment Lease	71	17	2 S	14 W
Huntington Beach				
Dome Oil Co.				
Newland-Borchard	1	14	6 S	11 W
Santa Barbara County				
Petroleum Securities Co.				
Los Alamos	1	6	7 N	32 W
Midway				
Standard Oil Co.	13	11	32 S	24 E
Standard Oil Co.	93	11	32 S	24 E
Edison				
Mohawk Petroleum Co.				
Weichelt	1	26	30 S	29 E
Monterey Exploration Co.				
Duff	4	15	30 S	29 E
Mountain View				
Standard Oil Co.				
Ranton	2	24	30 S	28 E
Deepen or Redrill				
Long Beach				
Fairchild & Mitchell				
Wilhelm	1	29	4 S	12 W
Inglewood				
Standard Oil Co.				
Baldwin-Cienega	52	17	2 S	14 W
Rosecrans				
H. J. Montgomery	1	7	3 S	13 W
Santa Fe Springs				
Shell Oil Co.				
G. H. N.	17 and 25	31	2 S	11 W
Associated Oil Co.				
Green	2	6	3 S	11 W
Whittier Santa Fe Springs Oil Co.				
Alexander	2	6	3 S	11 W
Montebello				
Fullerton Oil Co.	23	6	2 S	11 W
Ventura				
Shell Oil Co.				
Taylor	34	29	3 N	23 W
San Luis Obispo County				
L. P. Beer	1	12	32 S	22 E
Midway				
Pan American Petroleum Co.				
Buena Fe	50	22	32 S	23 E
Standard Oil Co.				
Eagle Creek	23	31	31 S	23 E
Engineers Oil Co., Ltd.	2	14	31 S	22 E
C. C. M. O. Co.	12 & 30	6	32 S	23 E
C. C. M. O. Co.	43	8	32 S	23 E
North American Oil Cons	42	30	31 S	24 E
Abandon				
Torrance				
Henry Wertalla				
Knape	1	24	4 S	14 W
Ventura				
Shell Oil Co.				
Gosnell	8-A	27	3 N	23 W
Monterey County				
James M. Douglas				
Smith	1	36	22 S	9 E
Kern River				
Montana-Fresno Oil Co.	1	13	28 S	27 E
Coalinga				
The Texas Co.	1	35	20 S	14 E

Subsurface Repair Work
With Special Cementing Equipment
Gives Greater Economy

By Wallace A. Sawdon

Petroleum Engineer, Los Angeles

While subsurface repair work involving the use of cement is often accomplished without the use of special equipment, there are few of these jobs that cannot be done with greater economy and safety by the application of such equipment. This is especially true where circulation is impossible or where it can be secured only by the use of high pressures. The conditions existing in the hole are far different when recementing or well repairing is to be done from those that obtain when a string of pipe is landed for an original cement job; and it is natural to assume that good practice would recommend the utilization of equipment designed to meet the conditions.

Cementing equipment should, however, provide for more than economy and safety in the use of the equipment itself. No matter how carefully a cementing job is performed, there is always a chance of failure due to causes that sometimes cannot be governed. The special equipment should, therefore, minimize these causes; but of equal importance, it should also provide for a repetition of the job, if necessary, without placing an additional obstacle to be overcome in subsequent operations.

Another advantage in a certain type of cementing equipment was disclosed in a recent well repair job in the Santa Fe Springs field. This was the ability to introduce additional cement in a continuous job where the amount of cement that could be put behind the casing could not be estimated. When this particular job was started, moreover, it was not known whether it would have to be a squeeze job or whether circulation could be obtained. In fact, it was not even known whether any cement could be forced behind the casing.

The well was Ring Oil Co.'s A 10, in which water was coming around the shoe of the seven-inch string. The source of the water was some distance above the shoe and this provided for cementing above the bottom of the string. Perforations were therefore made 18 ft. above the shoe and a cement retainer set at 4313 ft. A cement plug had previously been placed in a 4¾-inch liner to provide a bridge for the cementing job. The general scheme of operation is shown in the accompanying drawing.

Pressure was first built up to about 500 pounds to see if the formations would take any fluid. No fluid, however, could be forced out at this pressure; but since cement retainers had frequently been used for pressures over 2000 pounds, it was decided to build up the pressure until circulation could be obtained. This was done and circulation through the cement retainer, out the perforations and up behind the casing was secured at 900 pounds per square inch.

Circulation then continued at 300 pounds and 45 sacks of cement were started down the 3-inch drill pipe on which the cement retainer was run and operated. A circulation jar was used in connection with and just above the retainer. This jar contains a valve which is closed when a strain is taken on the drill pipe and opened when the strain is removed. When this valve is open, fluid being pumped down the drill pipe will pass out into the casing without going through the retainer and being forced into the formation or behind the casing.

A cement retainer provides means of placing cement behind casing in additional amounts over that first calculated.

This article describes how 148 sacks of cement were used in five batches—but in one continuous operation.

The valve was therefore kept open until the cement reached the retainer; it was then closed and only the cement forced through the retainer and into position behind the pipe.

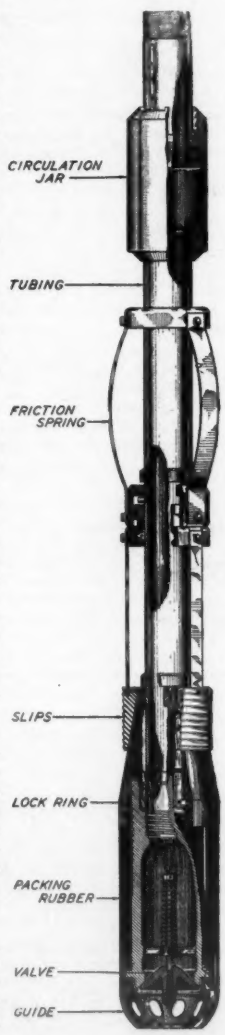
This first batch of cement was put behind the casing with a maximum pressure of 750 pounds and since the amount of cement that could be placed was not known, it was decided to use another 25 sacks. Water had been used to follow the first cement so the valve in the circulation jar was opened to pass it into the casing until the second batch of cement reached the retainer.

The second batch of cement required a pressure of 1000 pounds but it was decided to try putting in 20 sacks more. For this third job, only 900 pounds were required, so another 20 sacks were put in. During this fourth job the maximum pressure was only 750 pounds. A fifth batch of 38 sacks was therefore introduced and was placed with a final pressure of 900 pounds.

The total number of 148 sacks of cement, while being pumped in five different lots, was actually placed in one continuous operation. The clear water used between the batches of cement did not interfere with the job since it was passed out of the drill pipe and into the casing before it reached the cement retainer.

A careful check was kept on the strain taken on the drill pipe during the opening and closing of the valve in the circulation jar since the strain cannot be relieved to a point below which the slips setting the cement retainer take hold. During this particular operation, the weight indicator read 30 points when the valve was open and 38 points when it was closed. With the strain thus determined for the first run of cement, the weight indicator provided an easy method for opening and closing the valve. The drill pipe was hung on elevators, of course, and it is always advisable to follow this procedure when using a cement retainer.

The equipment used in the above operations was the Baker Cement Retainer. To facilitate drilling out, its metal parts are made of cast iron and, in the standard type, the packing rubber is only ten inches long. The drawing illustrates the operation of the device.



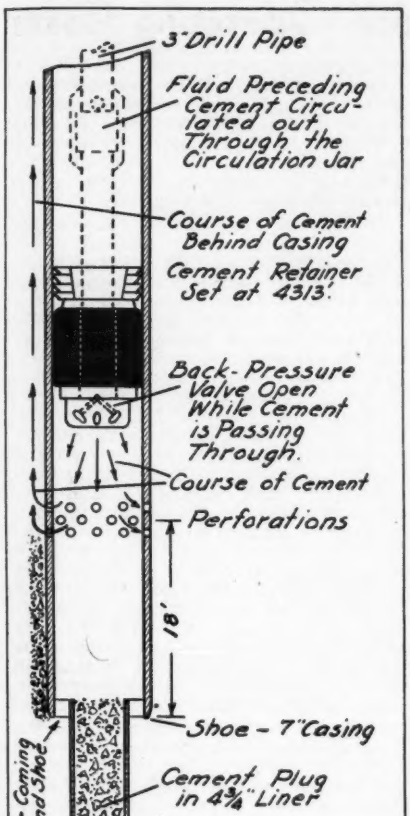
The retainer is run into the hole slowly on drill pipe or tubing to prevent any down - swabbing action and to protect the packing rubber. In most cases, the circulation jar is used with the retainer and the fluid pressure will open its valve to permit the fluid to enter the tubing or drill pipe without necessitating filling from the top.

When the retainer has reached the point where it is to be set, the pipe is turned to the right to release the slips. The tubing is then raised until the slips take hold. The place where the slips first take hold should be marked so that the pipe will not be lowered below this point during subsequent operations. The distance required to set the slips is governed by the stretch in the tubing or drill pipe but is usually between 12 and 24 inches.

The valve in the circulation jar is operated by the strain on the pipe on which the retainer is run. When the strain is relieved—but not enough to disengage the slips—the valve

is opened and permits fluid being pumped down the pipe to pass into the casing before it enters the cement retainer. When the strain is taken on the pipe, this valve closes and makes the fluid or cement pass through the retainer.

The back pressure valve in the bottom of the retainer prevents the return of cement after it has once passed through. As soon as the cementing operation is completed, the tubing or drill pipe is unscrewed at the right-hand thread and is raised a few feet. Circulation is continued until the pipe is free of cement. Should there be a delay in unscrewing from the retainer, any excess cement can always be circulated from the tubing through the circulation jar.


3" Drill Pipe
Fluid Preceding Cement Circulated out Through the Circulation Jar
Course of Cement Behind Casing
Cement Retainer Set at 4313'
Back-Pressure Valve Open While Cement is Passing Through.
Course of Cement
Perforations
18'
Shoe - 7" Casing
Cement Plug in 4¾" Liner
Water Coming Around Shoe
(Diagrammatic. Not to Scale)

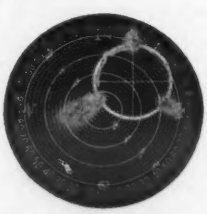
General scheme of cementing operations used in Ring well at Santa Fe Springs.

Completions -- Recompletions -- June

	Well No.	Location	Initial Potential B/D
SAN JOAQUIN VALLEY			
Buena Vista			
Murvale Oil Company			
Well	12	12,32–23	80 E
Coalinga West			
Associated Oil Company			
Coalinga Unity	1,2,3,4	12,20–14	25
Shawmut	1,2,3,4,5,21,25, 26,27,31,34,41,44	12,20–14	95
Spinks Crude	1A,2A,4A,4B, 1C,4C,1D,2D,4D	12,20–14	40
C.P.& R.H.S.	4,6,8,9	7,20–15	25
Marion	2	6,21–15	30
Coffee Canyon			
Shamrock Petroleum Co.			
Coffee	4	6,28–29	150 E
Elk Hills			
Standard Oil Company			
Tupman	45	36,30–24	377 T
Fruitvale			
Cascade Oil Company			
Newberry	2	23,29–27	248 T
Maddy, J. C.			
Well	1	23,29–27	10 E
Western Gulf Oil Co.			
K.C.L.–B	13	22,29–27	25 E
Kettleman North Dome			
Associated Oil Company			
Whepley	4	35,21–17	1,768 T
K.N.D.A			
Well	74	32J,21–17	14,043 B
Standard Oil Company			
Well	58	27J,21–17	9,124 T
Midway-Maricopa			
Combined Oil Co.	2,3,5,6,8	14,31–22	30
C.C.M.O.Co.	3,9	4,32–23	20
General Petroleum Corp.			
Sunset 33B Banner	1	33,12–24	12 E
Union Oil Company			
Editor	1	22,32–23	50 E
Wilbert Oil Company	1,2	22,32–23	20
Mount Poso			
General Petroleum Corp.			
Gilde	18	21,27–28	161 T
Modoc Petroleum Co.			
Johnson	2	28,26–28	99 T
Texas Company, The			
Vedder	6	4,27–28	598 T
Mountain View			
Hogan Petroleum Co.			
Midstate	1	29,30–29	125 E
Hubro Oil Corporation			
Nobel Petrol	1	30,30–29	500 E
Mohawk Petroleum Co.			
Clendenen	2	30,30–29	1,500 E
Mabry	1	24,30–28	500 E
Standard Oil Company			
Ranton	1	34,30–28	1,213 T
Wood-Callahan Oil Co.			
National	1	30,30–29	2,789 T
Premier			
Ohio Oil Company			
Midway Premier	1	32,27–27	175 E
Devils Den			
Richfield Oil Company			
Alferitz	1	14,25–18	95 E
COASTAL DISTRICT			
Ventura Avenue			
Associated Oil Company		NW¼ of NW¼ Sec. 27,3–23	180 T
Lloyd	7		
Shell Oil Company		SW¼ of NW¼ Sec. 28,3–11	98 T
Taylor	53		
Taylor	80	2285S-6952W from R.C.L. Cor. 11	1,000T
VENTURA-NEWHALL			
Newhall			
So. Calif. Drilling Co.		N½ Cor. Sec. 13,3–16	30M
Needham	1		
Sespe Canyon			
Kirk, W. A.		SE¼ of SE¼ Sec. 1,4–20	80M
Kentuck	13		
Sisar-Silverthread			
Garner Royalties Co., Ltd.		150N-150W SW Cor. of NE¼ of SE¼ Sec. 12,4–22	20M
Ojai	1		
LOS ANGELES BASIN			
Dominguez			
Shell Oil Company		932S-2874E from NW Cor. Reyes Lease	1,917 T
Reyes	53		
Reyes	54	981S-2173E from NW Cor. Reyes Lease	2,095 T
Union Oil Company		1150W-1525N C/L Cent.& Victoria	635 T
Callender	34		363 T
Heilman	12		
Heilman	28	1150E-915N C/L Cent.& Victoria	200 T
West Coyote			
Standard Oil Company		N¼ Sec. 24,3–11	236 T
Emery	56		
Huntington Beach New			
Standard Oil Company		N. side Ocean Ave. 750 W of 23 St.	1,647T
Huntington "B"	65		
Huntington Beach Old			
Surety Oil Company		100 S. 17th St. E. side of Huntington	3M
Allen	2		
Inglewood			
Standard Oil Company			
L. A. Inv. Co.	70	200S-165W of SW Cor. Shell Rindge Lease 8,2–14	1,402 T
Vickers	1–27	1508Sly. from NW Cor. Vickers Ls. on W. prop. line & 294Ely. on N. prop. line Sec. 7,2–14	589 T
Long Beach			
Concord Oil Company		1841S-140W SW Cor. Walnut & Burnett	176 T
Derry	6		
Dabney-Johnson Oil Corp.		600 N. Burnett on E. side of Orange	429 T
Casanave	4		
Nakamura	62	E. Side Creston bet. Walnut & Cherry	186 T
Nakamura	89	600N-50E C/L Hill & Rose	91M
Deco Oil Company		Lot 1—Burnett Villa Tract	244M
Well	1		
Duty-Kale (Winshale Oil Co.)		300N-540E C/L 21 & Cherry	90M
Kale	1		
Dye, Oscar		646N-726W C/L Hill & Cherry	302 E
Randall	1		
Edwards, W. T.		75E-75S C/L Loma & State	26M
Cox	1		
Harris, R. M.		150 C/L Orange & Willow	25M
Chaney	1		
Italo Petroleum Corp.		100N-20E SW Cor. Italo Fee Lease	50M
Fee	1		
McKeon, R. S.		366N-102W C/L Cherry & Hill	388 T
Plymouth	11		
Rawco Oil Company		200S-50W C/L Lewis & Willow	135M
Decker	1		
Rio Grande Oil Company		200S-100E C/L Linden & Wardlow	25 T
Derry	6		
Shell Oil Company		58S-518E C/L Temple & Signal Hill Blvd.	25 E
Alamitos	18		
Horsch	2	500E-100S C/L 25 & Cherry	150 T
Westport Oil Company		3178-110E SE Cor. 25 & Gundry	507 T
Lindy	1		
Montebello			
Standard Oil Company		690S-2050E NW Cor. Sec. 6, 2–11	396T
Temple 20			
Playa del Rey			
Donnelly & Lindberg		Lt. 13, Bl. 10 Silver Strand Tr.	20M
Crawford	3		
Rosecrans-Athens			
Union Oil Company		SW Cor. 128 & Figueroa	65 T
Howard Park	23		
Santa Fe Springs			
Bandini Pet. Corp.		550S-700W C/L Tel. & Shoemacher	319M
Off	6		
East Sant Fe Oil Co.		150S-300W C/L Spr. & Little Lake	50M
National (Johnson)	2		
General Petroleum Corp.		1100S-150E C/L Tel & S.F.R.R.	151M
S.F.& S.F.Comm.	22		
S.F.& S.F.Comm.	46A	100N-164E C/L Tel. & Romandel	188 T
Shell Oil Company		150S-40E NW Cor. of Lease	182 T
G.H.& N.	27		
Union Oil Company		940N-34E C/L Cent. & Teleg.	173M
Farwell	5		
Torrance-Hermosa			
General Petroleum Corp.		NE¼ of NW¼ Sec. 8,4–14	47 T
Carson	12		
Other Fields—L.A.Basin			
Pacific Oil Inv. Company			
Lupe			10 E

B—24-hour test.
E—Estimated.
M—Provisional Potential based on reported production.
T—Flow test potential.

Note:—Wells completed too late to incorporate in July allocation schedules, will be shown in this report of July, 1934, and for Methods of Allocation will be considered July 1, 1934, completions, etc.



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By C. W. Woods
District Manager, Refinite Co.

Boilers are critical judges of water. Each particular water with its individual characteristics provides a difficult problem in the correction of objectionable features.

The most objectionable property of water for boiler consumption is termed "hardness". It is responsible for scale, pitting, and corrosion. Almost everything under the sun has been used to correct this condition. Coffee, potatoes, crude oil and various other homemade remedies have been tried. Boiler compounds of various sorts are still being used, but results have fallen far short of their goal. Once hardness gets into the boiler, it is difficult to prevent the formation of scale, therefore, the most efficient method is to extract the detrimental properties from the water before it enters the boiler.

This method has been recognized since the first attempts were made to soften water with chemicals. Hydrated lime and soda ash, administered in the proper amounts according to the chemical analysis of the water, will counteract hardness. However, special tank equipment and feeders along with constant and close supervision are necessary for efficient results. The process is slow, and overdosing is as destructive as under-dosing. This system has therefore been limited in its use to railroads and other industries requiring only stationary boilers, where proper care and attention can be accorded them. It has certainly not answered the oilfield problem, where a compact, portable and easily operated machine is needed. The various combinations, and the daily variations, of hardness in the same water supply present real difficulties for chemical water softeners and boiler compounds.

"Hardness" is the amount of encrusting solids in water. "Temporary hardness" made up of the bicarbonates of calcium and magnesium will, at relatively low temperatures, release, as a gas, the carbon dioxide which holds them in solution. This reaction reduces the salts to the normal carbonates, which are practically insoluble in water, and the resultant precipitation causes scale. The calcium and magnesium sulphates are known as "permanent hardness", requiring higher temperatures to precipitate them. The chlorides are corrosive and are apt to cause pitting in boilers. Temperatures maintained in high pressure boilers will readily precipitate either class of hardness.

Water usually contains other salts. These salts do not form scale, so that the elimination of hardness will make water suitable for good boiler operation. Since chemical water softening is not adaptable for field boilers and treatment within the boiler is uncertain, other equipment must be used.

For this purpose, Zeolite, a natural and simple method for completely softening water and requiring only small and portable equipment, is the method generally used.

"Hardness" in water, both temporary and permanent is the generally recognized cause of scale formation in boilers. This article describes one method of removing the "hardness" from water, by using portable equipment, before it reaches the boiler.

Zeolite minerals are in the form of small granular particles and are usually divided into two classes, natural and synthetic. One natural Zeolite is mined on the eastern coast in the form of a dark green sand. Another natural product is found in clay formations in South Dakota. This clay is made into small particles and burned in a kiln at high temperature. The finished product is of a light red color and is absolutely insoluble in water.

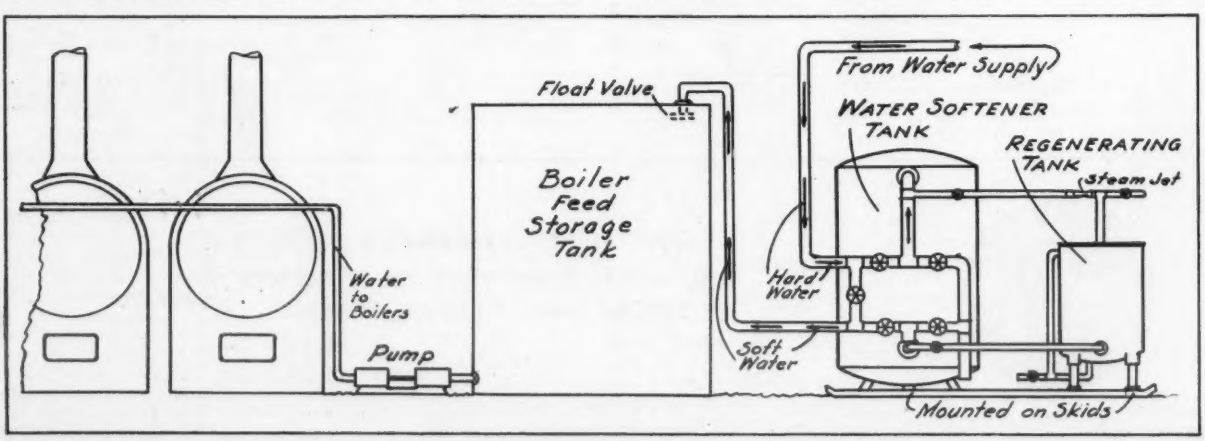
Synthetic Zeolites are manufactured either by fusing special chemicals or forming them into jells and allowing them to harden, after which they are ground up into small particles. It is generally conceded that the natural product is of the greater efficiency and durability.

Zeolites all contain an appreciable amount of aluminum and silicate, which actually soften water. These are generally in the form of oxides and the amounts vary in the different brands of Zeolites, therefore the amount of hardness per cubic foot that the different Zeolites are capable of absorbing, will also vary. Therefore, it is important in the selection of a Zeolite water softener to investigate the type of Zeolite it contains in order that a balance between high capacity and durability will be obtained.

Zeolite minerals soften water by contact, called "base exchange". The mineral absorbs calcium and magnesium and exchanges sodium in its place. To soften water, the Zeolite must first be charged with sodium. Having a greater affinity for calcium and magnesium, the mineral will extract all these elements from the water even though they exist in very small quantities. For instance, when the mineral contacts magnesium sulphate in water, it will absorb all of the magnesium and exchange sodium, with the result that the water then contains sodium sulphate, or a soft salt.

When the Zeolite has depleted itself of sodium, it loses its power of exchange until it is regenerated. This is accomplished by bringing a strong solution of sodium salt in contact with the Zeolite. Sodium Chloride (common salt) is the most extensively used regenerating material because it is neutral, cheap and easily obtainable.

The Zeolite mineral is forced to reverse its action even though its liking for sodium is less, because of the concentration of the sodium brine. Calcium and magnesium are passed off as the Zeolite absorbs the sodium. The excess brine and hardness are then washed from the



Zeolite particles with fresh water, and the mineral is again ready to soften water.

Zeolite reactions, both when softening water and when regenerating, are accomplished without the formation of sludge. The calcium and magnesium in both cases are held in solution. The regeneration fluid, after passing through the Zeolites, may carry 1000 or more grains of hardness per gallon, because the entire accumulation of calcium and magnesium in the Zeolite bed is passing out in concentrated form, but still this concentrated fluid will be clear. There is no danger of clogging the Zeolite bed with encrustation, and there is no difficulty in getting rid of the accumulated hardness which the Zeolite expels during regeneration.

Zeolite mineral has been harnessed for practical use by housing it in a tank to at least three feet in depth, with several inches of graded gravel beneath it, acting as a supporting bed. A strainer system is provided in the bottom of the tank to allow the water to pass through evenly from the whole area of the tank, without allowing the particles of mineral or gravel to be lost with the water. The tank may be open or closed at the top depending on whether it is for gravity or pressure use. Hard water is generally introduced at the top, filters down through the bed, and soft water is discharged from the bottom. Control valves are provided, and an auxiliary tank holding salt brine with a quick means for transferring it to the softener at regeneration time is part of the equipment.

The softeners are often equipped with water meters to indicate when the softener has produced its rated capacity of soft water for the particular run and when regeneration is to be expected. Since the amount of hardness that each cubic foot of the particular Zeolite used will exchange, is known, the soft water capacity of the softener in gallons can be calculated.

Each Zeolite water softener, regardless of make, is equipped with a soap testing kit, so that any layman can quickly check the quality of the water the softener is producing.

The time necessary to regenerate a softener is about forty-five minutes from the time the machine is taken off the line until it is again ready for service. The entire soft water capacity of the softener can be delivered in approximately four hours. For instance, if a plant is softening water of about 30 grains hardness per gallon, and the capacity is 10,000 gallons of soft water per salt regeneration, it can be operated at a rate of 2500 gallons per hour, or about 42 gallons per minute. It will operate at any speed less than that and generally the size softener selected is one that will provide soft water service for at least eight hours between regenerations. If the purchaser wishes to regenerate only once in twenty-four hours, a larger softener is selected. If the user has no soft water storage tank to be used while the softener is off the line for regeneration, a two-unit softening system can be installed for continuous soft water service. Zeolite water softeners are no experiment. The laundry industry was probably the first to use them extensively, and many oil companies have installed Zeolite water softeners for their boiler setups at refineries, gasoline plants and pumping stations.

Penn Now Julian Trustee

Stockholders of C. C. Julian Oil & Royalties Co. in Los Angeles have elected H. A. Penn as trustee. Creditors in Oklahoma City have asked the Federal court to declare the company insolvent and have it reorganized under the new bankruptcy law. At present, A. H. Rutherford of San Diego is acting as trustee under court appointment which the Penn supporters believe they can show to be invalid in the coming court proceedings.

Eighteen producing wells and interests in eight others are owned by the company. The wells comprise two gassers and one oil well at Oklahoma City, six in Wichita county, Texas, four in Jones county, Texas, and five in East Texas. Wells in which it has a partial interest comprise two at Oklahoma City and six in Wichita county. The company is in receivership. Julian lost all his interests long before his death.

Axelson Back From Europe

J. C. Axelson, president of the Axelson Manufacturing Co., has returned from an European trip which included the principal European oil fields. He is expected in Los Angeles the latter part of July, at which time he will make a detailed report of conditions in the various oil fields for the benefit of his sales organization and various affiliated groups.

Lineberger Erecting Plant

Walter F. Lineberger, former Congressman, and W. R. Jackson of Long Beach have let contract for a plant they have planned for several years near Casmalia to extract oil and several other products from the huge deposits of diatomaceous earth long known to exist on a tract of 571 acres. Work is reported as already under way.

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Superior Backs Up Kettleman Hills Well

Superior Oil Co. has backed up to the 8600-ft. level in its Huffman No. 8 in sec. 29, 21-17, Kettleman North Dome, after carrying the hole down below 9000 ft., and is preparing to drill by a fish. The well is being carried down to explore the possibilities of the Kreyenhagen formation which underlies the deep zone penetrated by Associated on its Whepley lease. Kenda drillers tapped this formation in one of its wells located farther to the northwest.

Superior is not putting out any information as to the results of its drilling in the 9000-ft. zone, but the project is headed for still lower regions.

This is the final test on the Huffman quarter-section, to date the most prolific producing 160 acres in the Kettleman North Dome. Under the Kettleman agreement but one well to 20 acres can be drilled, and Superior No. 8 will complete this quota.

Union Oil-Amerada Petroleum's jointly owned King property has five producers, two wells drilling for the deep sand and a location staked for the final well of the 8-well quota. The King property corners to the south of the Huffman lease.

Standard Oil Co., which owns in fee the northwest and southeast quarters, has not pursued as consistent a drilling program as Superior and Union. Under the new method of allocation for Kettleman North Dome, it will be necessary for Standard to speed up its drilling if it is to obtain its full quota as volume of oil is to be the basic measurement in the future. Kenda, which holds offsetting properties to this section 29, already has taken steps to protect its property lines by increased drilling.

Superior Oil Co. drilled the first gusher on the section, making remarkably fast drilling time. Under the supervision of W. M. Keck, head of Superior Oil Co., and W. A. Pruett, general drilling superintendent, all of the company's eight wells have been drilled with a maximum of speed and a minimum of mechanical difficulties. The Huffman lease has proved a regular bonanza to the Superior, as well as to the Huffmans who picked up the property for an insignificant sum, held onto it for years and finally achieved wealth beyond their wildest dreams.

With the cleanup of Huffman No. 8, Superior Oil Co. will concentrate its efforts on development outside California. Recently the company tapped a rich oil pool in western Louisiana, not far from the town of Lafayette. The hole was finished in the 5000-ft. zone, whereas the strike had been anticipated around 3500 ft. The company has several thousand acres under lease in this tract and has shipped California equipment for future drilling, with Mr. Pruett to superintend active development.

The company also holds big blocks of acreage in west Texas and coreholing is now in progress preliminary to the drilling of the first test well. These projects do not of necessity mean that Superior is through with its California activities. For the present, however, when the Kettleman program is completed the company has no immediate plans for further drilling, but will keep on the lookout for new holdings to add to its reserves.

Sovereign Well Wet

Sovereign's No. 2, sec. 30, 30-29, Mountain View, has tested wet. This week the company is running a water-witch to locate the source of trouble. If it is around the shoe, a squeeze job will follow; otherwise the hole will be drilled deeper. Bottom is at 5994, with casing set at 5720. The well offsets Mohawk's Hood. Number 3 will be started at once. It will offset Barnsdall's Mott No. 1 and Hogan's Porter-Day No. 4.

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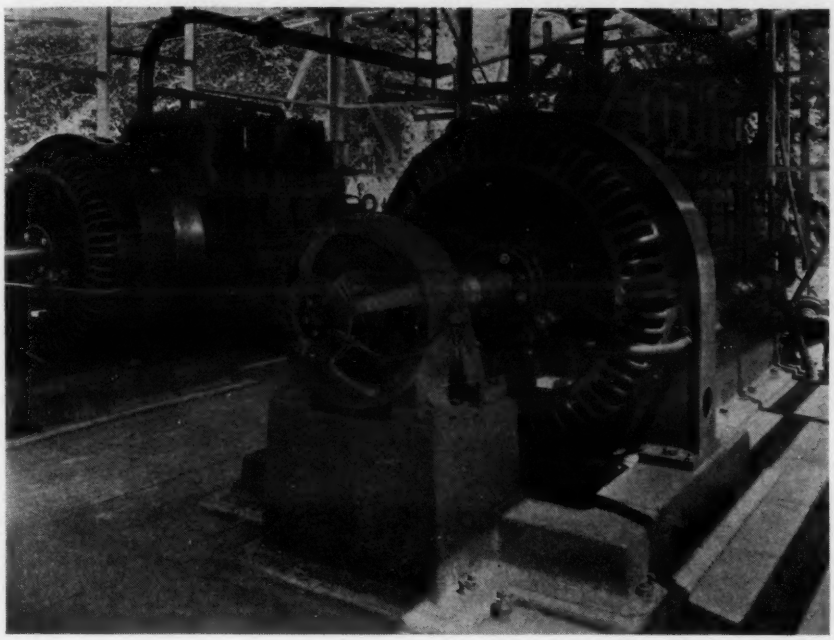


Generator End

The Birch Oil Co., which has operated at Brea for many years, has recently completed the installation of a new power plant for the furnishing of electric power for all uses on its lease. The power is used in pumping of the company's wells as well as for lights and general use.

According to Joseph Royer, general manager of the Birch properties, savings in operating expense will amortize the plant in a period of about thirty months, although the company is operating under curtailment and is not allowed to produce the properties at full capacity, either of the wells or the plant. In addition, total cumulative savings, compared with the former method of operation, after the plant is amortized, will exceed $125,000 by conservative estimate, figuring the life of the plant at 15 years, which is the customary length of life of such an installation. This savings figure was arrived at after the interest on the investment and carrying charges had been taken into consideration. Another feature of the plant that results in economical operation is that it does not require the employment of any additional men to operate it. It is being, and will be, operated by the company's regular personnel.

The generating plant is gas engine driven and is composed of two units. The first unit is a six-cylinder 4-cycle vertical Clark natural gas engine, 9-inch bore by 11-inch stroke, with an operating speed of 500 rpm, directly connected to a 187 KVA, 440-volt, 3-phase, 50-cycle General Electric alternator and exciter. The second unit consists of a four cylinder engine of the same design, except that the generator is 156 KVA.

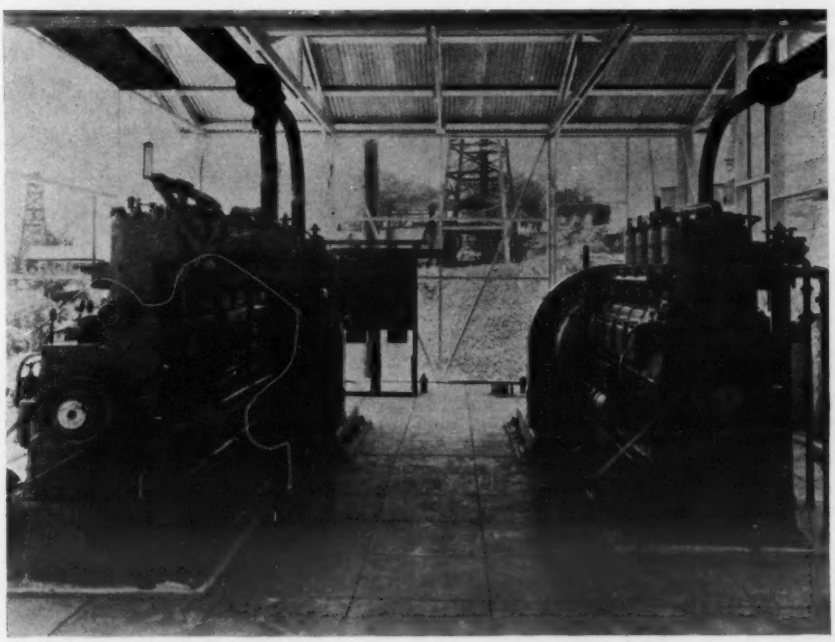
Either unit is sufficient for pulling the normal load, but when tubing or casing are being pulled, both units are operated in parallel. The normal load consists of four 20/55 hp, six 15/35 hp well pumping motors, five residences, three bunkhouses, a circulating pump, and a few other small motors in the machine shop. Either unit will pull this normal load, but when tubing or casing is being pulled, the units are operated in parallel to furnish the extra power needed. The units are paralleled through a modern type switchboard, equipped with the necessary instruments for this purpose as well as for all field disconnects. The switchboard itself is located in the powerhouse.

The cooling system is indirect, the jackets being cooled by individual pumps, located on each engine, which pump through coils located in the cooling tower. Water is pumped over these coils by means of a separate motor-driven pump located close to the tower.

The engines are started by means of compressed air, furnished by a 21 c. f. direct engine-driven compressor. The air is admitted into all cylinders, and starts the engines with the ease of the modern automobile.

All moving parts of the engines are enclosed and lubricated by a force feed oiling system, which continually cools and filters the oil, insuring clean oil and low consumption, as well as reducing wear. Protective devices against oil and water failure are also included in each unit.

The engines are a product of Clark Brothers, and the entire plant was installed under the supervision of Smith Booth Usher Co., Pacific Coast distributors for Clark.



Governor End

U. S. Stocks Gain 95,000

Stocks of domestic and foreign crude petroleum on Saturday, July 14, totaled 344,187,000 bbls., an increase of 95,000 over the total of 344,092,000 on hand on the preceding Saturday. This increase, which followed a gain of 385,000 bbls. during the previous week, comprised an increase of 91,000 in stocks of domestic crude and an increase of 4000 in foreign crude stocks.

Current reports of the industry for the week ended July 14, in comparison with those for the previous week, indicate that daily average crude production increased approximately 100,000 bbls., that imports remained virtually stationary, and that crude runs to stills increased about 65,000 daily. The approximate daily average balance of crude oil for the week ended July 14 was as follows (barrels): Production, 2,670,000; imports 86,000, equals runs to stills, 2,565,000; increase in stocks, 14,000; exports, losses, etc., 177,000. Total daily average demand for crude oil for the week ended July 14 therefore averaged 2,742,000 bbls. daily.

CRUDE PETROLEUM STOCKS REPORTED BY COMPANIES HOLDING 100,000 BARRELS OR MORE

Grade of Crude Oil	Stocks Held By Reporting —Companies— July 7, 1934	July 14, 1934	Change from July 7, 1934
	—Thousands of Barrels—		
Pennsylvania Grade.	4,632	4,619	— 13
Other Appalachian, including Ky.	1,247	1,255	+ 8
Lima-N. E. Indiana-Michigan	1,537	1,478	— 59
Illinois-S. W. Indiana	11,280	11,331	+ 51
N. Louisiana and Arkansas	10,843	10,692	—151
West Texas and S. E. New Mexico ..	29,353	29,576	+223
East Texas	41,184	40,866	—318
Other Mid-Continent	161,722	161,367	—355
Gulf Coast	16,887	17,628	+741
Rocky Mountain ...	27,887	27,864	— 23
California	33,841	33,828	— 13
Total domestic crude	340,413	340,504	+ 91
Foreign crude	3,679	3,683	+ 4
Total crude	344,092	344,187	+ 95

IMPORTS and RECEIPTS

	Week Ended July 21 1934	Week Ended July 14 1934	Week Ended July 22 1933
	Total All Imports		
Imports of petroleum at principal U. S. ports..	441,000	1,086,000	1,168,000
Receipts of California oil at Atlantic and Gulf ports	652,000	310,000	44,000

STOCKS, REFINERY STATISTICS

Week Ended July 21, 1934	California	U. S.
Finished gasoline at refineries..	10,863,000	32,065,000
Bulk terminals, in transit, pipe lines, and other motor fuel..	3,845,000	21,216,000
Stocks of unfinished gasoline...	1,017,000	6,747,000
Gas and Fuel Oil stocks.....	.....	109,208,000
Heavy Crude and Fuel stocks...	78,099,000	.....
Crude run to stills (daily av.)..	425,568	2,431,000
Potential capacity reporting....	96.9%	89.7%
Percent capacity operated.....	50.1%	64.6%
Cracked gasoline produced (daily average)	53,072	483,000

California June Crude Production

(Continued from Page 4)

San Joaquin Valley, five in the coastal fields, and 16 in the Los Angeles Basin, with six unidentified wildcats. There were 200 wells actually drilling, as compared with 188 during May. Of the 200 wells, 65 were in the Valley, 37 on the coast, and 61 were in the Basin. In addition, 32 wildcats were being drilled, and five wells were drilling in gas fields of the state.

The number of producers completed, 35, during June, decreased eight from the May figure of 43. Total daily initial production from the 35 producers was 36,334 bbls., an average of 1038 per well. May initial production was 83,009 bbls., an average of 1930 per well, making the June average 892 bbls. per well less than the May average. The difference in the initial average is found mainly in the fact that there were fewer completions on the North Dome during June than during May, and the North Dome wells served to bring the average up during the last-named month.

A further point of interest in the A. P. I. report is that the total number of wells on production in the state again increased during June. The June total was 11,007, an increase of 98 over the total of 10,909 on production during May. The total number of wells on production has increased by 2048 since June, 1933.

With the total number of wells on production listed at 11,007, average production per well during June totaled 1405 bbls., or 46.84 bbls. per well per day.

Vejar 1 Gets Showings

After coring slowly through some very hard formation, strong showings of oil and gas were encountered in Vejar No. 1, being drilled in Richfield by the Mid-Rich Drilling Co. for the MacQuinn Oil Leasing Co., according to company advices.

Tanks are under construction and a production test will be attempted in a day or two with bottom of the hole below 2470 ft.

PRODUCTION

	Week Ended July 21 1934	Week Ended July 14 1934	Week Ended July 22 1933
California	**529,400**	**529,200**	**491,200**
Oklahoma	533,700	551,050	621,550
Kansas	135,550	135,700	128,550
Panhandle, Tex.	61,550	58,600	50,300
North Texas	58,500	58,400	50,650
W. Cent. Texas	27,150	27,150	21,800
West Texas	147,700	142,000	158,050
E. Cent. Texas	50,700	51,250	58,000
East Texas	465,950	463,450	548,800
Conroe	47,500	47,200	80,400
Southwest Texas	56,750	59,500	52,200
N. Louisiana	24,850	24,850	26,350
Arkansas	31,800	31,800	31,350
Coastal Texas	122,800	120,250	125,400
Coastal Louisiana	70,200	68,750	44,450
Eastern	101,950	103,100	92,050
Michigan	29,500	31,300	17,550
Wyoming	36,650	36,200	26,800
Montana	8,850	8,700	7,750
Colorado	3,000	3,800	2,550
New Mexico	48,750	48,500	37,600
Total (Daily Average)..	2,592,800	2,600,750	2,673,350

Fresno Well Abandoned

Western Gulf has started to plug and abandon the wildcat which it drilled in the Huron area of Fresno county, northeast of Coalinga, to 8650 ft. At bottom the first and last showing of oil was found, and a test was made but the result was trifling. Western Gulf has a big acreage, which includes all the Southern Pacific lands, over a large area and may or may not drill again at some other point thereupon.

Western Gulf has 10,000 acres around Oxnard and has been considering whether or not to drill there.

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FOR LEASE

Prospective new oil field Kern Co., 320 acres. Survey reports good. No bonus if first well completed in six months. Geo. L. Van Antwerp, 929 So. Dunsmuir, Los Angeles. 8-2

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Search For Natural Gas In Fore As Result Of Recent Discoveries

Search for new natural gas reserves, which has been proceeding so quietly as to attract little attention, has suddenly stepped into the foreground of the production activity during the last couple of weeks, due principally to strikes made by Ohio Oil Co. in the old Buena Vista Lake region, and by Standard Oil Co. at McKittrick.

While it is still too early to forecast the importance of such development from a commercial standpoint, it marks the trend which wildcatting has taken. Its significance lies in the fact that California operators, faced with rapidly declining gas reserves in the large fields of Los Angeles Basin, have concentrated their forces on the development of new reserves.

Although Kettleman Hills' supply of natural gas, at the moment, appears to have declined but little, because of the orderly development of the field, certain thickly drilled sectors on fee acreage have shown unmistakable symptoms of depletion near the structural edges. The field as a whole, however, has maintained a surprisingly high pressure gauge, as was demonstrated by recent completions in the northwest sector where during June Kenda brought in a 14,000-bbl. producer (potential), and Standard Oil one which made 9100 bbls. during the flow test. Both of these completions were in the lower Temblor where the gas output is but nominal. The upper Temblor, which is the main natural gas reservoir for the Kettleman district, is the source from which the Standard-P. G. & E. supplies for Northern California have been obtained to a large extent this past year.

Ventura Avenue, the other important natural gas source from a commercial oil field, faces additional drilling as the result of deep zone developments, and undoubtedly—like Kettleman—will continue to figure in the front ranks of known gas supplies, especially since operators took steps to conserve this supply from too rapid depletion by correcting gas-oil ratios.

Milham Exploration, which brought in the discovery well on Kettleman North Dome, also has to its credit the discovery of Buttonwillow which to date has produced nothing but natural gas. Attempts have been made for oil, but without success. Because of the easy accessibility of both the Kettleman and Ventura Avenue natural gas, the Buttonwillow field has been held in reserve for the most part since its discovery. The field proper is controlled by Milham, which has ten wells, with an estimated initial capacity of 10,000,000 c.f. of gas, shut in for future demand.

Ohio's discovery in the old Buena Vista Lake bottom appears to have tapped another rich natural gas reservoir. Officials have stressed the need for further drilling to determine the real value of the strike. This well, drilled to 7950 ft., was plugged back to 5250 ft. where it was completed, and flowed at the rate of 8,000,000 c.f. a day through a quarter-inch bean during the flow test before it was shut in.

If Ohio's future drilling proves the existence of a commercial gas reserve, the company will add immeasurably to its own reserves, since Ohio controls the bulk of the acreage surrounding its well.

Standard Oil's test at McKittrick never was given a real flow test. Like the Buttonwillow field, McKittrick appears to be a natural gas reservoir and the first strike was made at the shallow level of approximately 2800 ft. The S. O. is carrying this test down in the expectation of making it an exploratory project, and early this week the drill was below 3600 ft. and still going ahead.

Standard and Shell Oil Co. have tapped gas zones in the Goleta area, and General Petroleum has added to the strikes by its development at Capitan, which lies west of Elwood. Dudley Ridge, southeast of Kettleman in the old Tulare Lake region, is another source of supply for small quantities of gas.

One of the most interested plays centers in the Semitropic region where thousands of acres lying between the two old Richfield tests—a distance of 10 miles apart—have been leased by the larger companies. While no active development has started, it is predicted that one or more projects in this area will be launched this fall.

Judged by the number and extent of the various tests already made, there appears little likelihood of any scarcity of natural gas supplies in California for some years to come.

Gasoline Reports Required

Washington—Oil Administrator Ickes has issued an order requiring producers and manufacturers of natural gasoline to submit monthly reports to the Administrator. Reports will be received by the Bureau of Mines and will be made out according to a new form issued by the Petroleum Administrative Board. This form calls for more detailed information on shipments than formerly was required.

With the additional data the bureau believes that the reports will assist in gauging cosumer demand for gasoline on a more accurate scale, which demand is now used as the basic measurement for allocation of gasoline and crude production allowables.

The new forms will be available for distribution early in August.

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California Production 530,900 Bbls. Per Day

California crude production was slightly higher for the week ended July 21 when the state's output was estimated at 530,900 bbls., as compared with 529,000 for the preceding seven-day period. By the end of the week operators had begun to pare down their production, with the Friday average but 528,000 bbls.

Kettleman Hills offered the surprise of the week with a daily average of 76,100 bbls. Compared with the previous week's total of 64,200 bbls., there was an increase of 11,900 bbls.—a new high for Kettleman which now leads the state, having wrested the honors from Long Beach which has held the top position for several years. Without doubt the Kettleman Hills increase was due to the Central Committee's action in approving the method of allotment for this field based on the volume of oil produced, rather than the volume of oil and gas—computed as the formation volume, which has been the basis upon which previous allotments have been made. Under the new method, it is pointed out, there will be a more equitable distribution, since companies with wells producing large amounts of gas will not be so heavily penalized.

Ventura Avenue stepped up to 29,500 daily, as against 27,900, while Los Angeles Basin wells eased off to 216,400 bbls., against 221,700 for the previous week. Long Beach dropped to 67,800, against 69,300 and Dominguez to 19,250, against 21,350. The only increase in the Basin group was at Huntington Beach which averaged 47,900 bbls. against 46,600. The unlisted group dropped from 134,400 to 130,000 bbls. daily, with prospects of still further recessions throughout the state during the current week.

Mid-Continent Strike Possibility Lessened

TULSA—With officials and workers of the Indian Territory Illuminating Oil Co. (Cities Service) practically agreed on such points as union recognition, vacations for field men, seniority rights and a grievance committee, the strike situation has simmered down with the outlook good for satisfactory adjustments through negotiations now in progress.

Further conferences are scheduled on the workers' demand for a 20% increase in wages. A compromise is expected on this matter. In the meantime, the company's 1200 workers in the Oklahoma City and Greater Seminole region remain at work.

Strike threats among workers of other companies have followed the same course, with wage conferences to be held with officials of the Wirt Franklin Petroleum Corp. and Tide Water Oil Co. Officials of Phillips Petroleum averted a strike of 70 filling station employes in Tulsa who sought wage increases of $25 to $35 monthly, furnishing and laundering of uniforms and elimination of charging of station workers for shortages in oil and gasoline inventories. Outcome of these deliberations has not yet been determined.

Kemnitzer Writes Book

William J. Kemnitzer, petroleum technologist, and co-author of "Petroleum in the United States and Possessions," has disassociated with J. Edward Jones, New York, and has begun preparation of a new book, "Economics of Petroleum," at the California Institute of Technology, Pasadena.

Inglewood Well Planned

East Santa Fe Oil Co. (J. A. Smith, W. J. Stabler, W. J. Barnhart), now working on Jalk No. 8, a former General Petroleum well at Santa Fe Springs, plans to start a well about Aug. 5 at Inglewood, location not yet announced.

Hartman Makes 1400 Bbls.

Associated Oil Co.'s latest completion, Hartman No. 14, in the Ventura Avenue field, for an initial yield of 1400 bbls. daily accompanied by a flow of 1,500,000 c.f. of wet gas, offers an illustration of the progress made in more satisfactory gas oil ratios in the Avenue field. Depth of the well was officially reported at 8431 ft.

Refinery Changes Name

D. R. Wilson Refining Co. of Signal Hill, now owned by the Lockharts, former owners of Rio Grande, and their associates, has changed its name to Envoy Petroleum Co.

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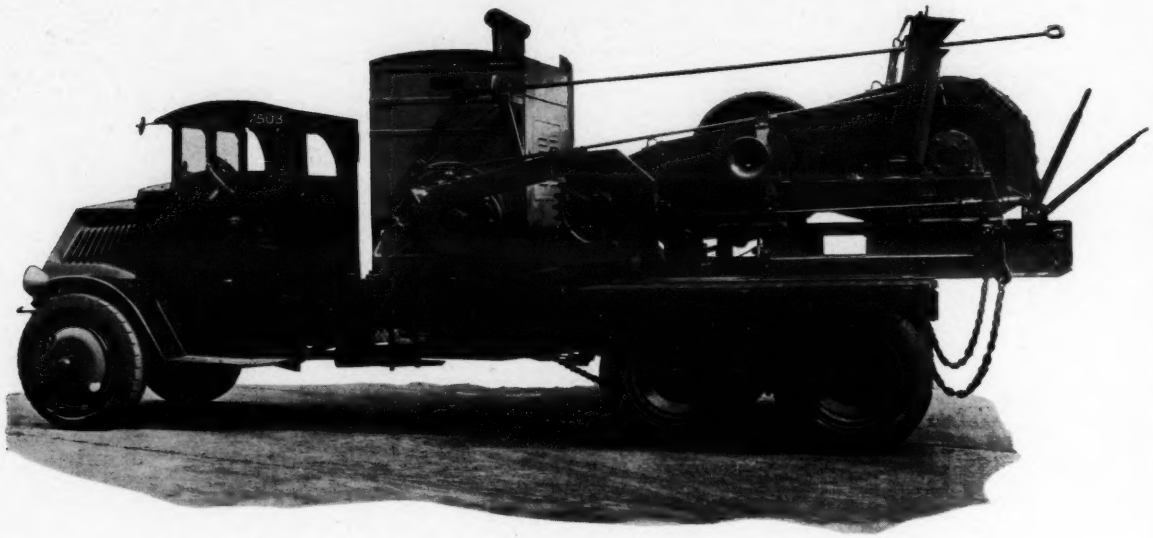

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